



>>Entry Name: Chromium copper oxide (CrCuO₄), 9CI

Synonym(s): Copper(II) chromate(VI)

CAS Registry Number: 13548-42-0

CuCrO₄

Molecular Formula: CrCuO₄

Molecular Weight: 179.54

Accurate Mass: 178.859767

Percentage Composition: Cr 28.96%; Cu 35.39%; O 35.65%

General Statement: Struct. may contain tetragonal 6 coord. Cu and tetrahedral Cr

Source/Synthesis: Synth. from K₂CrO₄ + Cu(NO₃)₂ in gel in the dark, or from CrO₃ + basic Cu carbonate at 220°

Use/Importance: Believed to be active constit. of Adkins oxidation catalyst containing CuO, Cr₂O₃ etc.

Physical Description: Dark red-black solid

References:

Arsene, J. *et al.*, *Rev. Chim. Miner.*, 1978, **15**, 318-327, (*uv-vis, epr*)

Seferiadis, N. *et al.*, *Acta Cryst. C*, 1987, **43**, 10-12, (*synth, cryst struct*)

Marks, O. *et al.*, *J. Solid State Chem.*, 1988, **77**, 15-25, (*synth, props*)

Das, I. *et al.*, *J. Phys. Chem.*, 1989, **93**, 7435-7440, (*synth, use*)

Baran, E.J., *Spectrochim. Acta A*, 1994, **50**, 2385-2389, (*ir, Raman, uv-vis*)